Specimens seen: 2 km S. of Mt. Holland, W.A. P.M. Olde and N. Marriott, 4.x.1988 HOLOTYPUS 222167 NSW. ISOTYPE PERTH.

3 km S. of Mt. Holland, W.A. around gravel pit in pure laterite. P.M. Olde and N. Marriott, 4.x.1988. NSW 222281. Several non-holotype duplicates of adult plants from this locality KWPA, MEL, CBG, CANB..

3 km S. of Mt. Holland, W.A. P.M. Olde and N. Marriott, 4.x.1988. Juvenile plant growing in gravel pit in pure laterite. NSW 222282.

Two living plants grafted from scion material collected at the same site as the holotype were also examined. These potted plants flowered in August/ September 1989 at the Royal Botanic Gardens, Sydney.

ACKNOWLEDGEMENTS

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A NEW SPECIES OF ACACIA FROM WESTERN AUSTRALIA

By R.S. COWAN and B.R. MASLIN,
Western Australian Herbarium,
Department of Conservation and Land Management,
P.O. Box 104, Como, Western Australia 6152

INTRODUCTION

Acacia declinata has been in cultivation for at least seven years in the garden of the Western Australian Herbarium, as well as at least two other locations in the State, without a name; now it will be offered to the public by one or more nurserymen and a name is needed in order to make it known to the market. It appears to do well in full sun and partial shade, making a very prickly, dense ground cover more resistant to treading upon than even *Hemiandra pungens*!

TAXONOMY

Acacia declinata Cowan & Maslin, sp. nov. (Fig. 1).

Typus: Amelup, Borden Road, Western Australia, 28 Sept. 1972, A.M. Ashby 4603 (holo: PERTH; iso: CANB, K, NY, PERTH).

Frutex dense intricate multiramosus prostratus 25-40 cm altus, ad c. 2 m diametro, ramulis teretibus, puberulis, pilis demum + declinatis. Phyllodia subteretia, compressa in sicco, sucpidato-pungentia, mucrone brunneo, pulvino nullo vel ad 0.3 mm longo, 7-22 mm longa, 0.8-1.2 mm lata, patentia sed denum plerumque declinata, recta ad leviter recurvata, glabra, medio-viridia, nervis 8, nervo adaxiali incompleto, glande plerumque nulla, interdum praesenti, ovali ad circulari, 1-3 mm supra basem phyllodii. Pedunculi 4-8.5 mm longi, graciles, glabri ad parce puberuli, bracteis basalibus oblongo-ovatis, cucullatis, acutis, 1-1.5 mm longis, puberulis. Capitula globularia, vivide lutea, circa 6 mm (2.5-3.5 mm in sicco) diametro, 9-20-floribus, bracteolis linearibus ad lineari-spathulatis, ciliolatis. Flores pentameri, sepalis

petalis minus quam ½ brevoria, libris, oblongis ad lineari-spathulatis vel spathulatis, ciliolatis; petalis libris, anguste ellipticis. Legumen lineare, undulatum, valde elevatum et subcarnosum supra semina, 30 mm longum, 2-2.5 mm latum, tenuiter coriaceum, glabrum. Semina longitudinalia, oblonga ad ovali-oblonga, 2.5 mm longa, 1.5 mm lata, nitido-nigra, arillo subapicali.

Dense, intricately branched, prostrate shrub 25-40 cm tall, spreading to c. 2 m diam. Bark smooth, grey. Branchlets terete, red-brown, becoming dark grey, puberulous, the hairs + retrorse or becoming so with age. New shoots with crimson tips. Stipules semi-persistent, triangular to subulate, to 1 mm long, glabrous, thin, dark brown. Phyllodes subterete, somewhat compressed (more strongly so when dry), cuspidate-pungent, tip brown, 7-22 mm long, 0.8-1.2 mm wide, rigid, persistent, patent, usually becoming reclined to descending, straight to shallowly recurved, glabrous, mid-green, stomata slightly raised; 8 in all, nerves 3/face, yellowish, salient, adaxial nerve not extendig to apex and occasionally bifurcating near phyllode base; sessile or with short pulvinus to 0.3 mm long; gland usually not evident, only present in the angle formed by bifurcation of adaxial nerve, minute, 1-3 mm above base of phyllode, plane to raised slightly, oval to circular. Peduncles 4-8.5 mm long, 2 per node, slender, glabrous to sparingly puberulous; basal bracts oblong-ovate, cucullate, acute, puberulous, 1-1.5 mm long. Heads globular, bright yellow, c. 6 mm (2.5-3.5 mm dry) diam., 9-20-flowered; bracteoles linear to linear-spathulate, ciliolate. Flowers pentamerous. Sepals less than half length of petals, free, oblong to linear-spathulate or spathulate, ciliolate. Petals narrowly elliptic, acute, free, glabrous. Ovary densely appressed-puberulous. Legume linear, undulate, strongly raised and subcarnose over but not constricted between seeds, 30 mm long, 2-2.5 mm wide, thinly coriaceous, glabrous. Seeds longitudinal, oblong to oval-oblong, unilaterally deeply constricted near apex, 2.5 mm long, 1.5 mm wide, 1-1.2 mm thick, glossy black; pleurogram elongate U-shaped, inconspicuous, 0.5 mm long, 0.4 mm wide; aril subapical, galeate.

Other specimens examined. Western Australia: Warrungup (Cranbrook road), J.S. Beard 7480 (PERTH); cultivated in W.A. Herbarium garden, South Perth, S. Curry 40 (PERTH); cultivated at Woogenilup, P.C. Luscombe 132 (PERTH); 41 km SSE of Ongerup, K. Newbey 9516 (MELU, PERTH); 22 mi [35.4 km] E of Albany on road towards Jerramungup, S. Paust 501 (PERTH); near Borden, N. Perry 569 (PERTH); cultivated in W.A. Herbarium garden, P.J. Poli 96 (PERTH); 41 km SSE of Ongerup, N. Stevens for K. Newbey KRN 9516-1 (MELU, PERTH); cultivated at Albany, late July 1982, E. Swainson (PERTH 00198242).

Distribution and habitat. The species grows naturally at the junction of the Roe, Eyre and Darling Botanical Districts (1:250,000 maps 150-11, 12). It is restricted the vicinity of Borden, Amelup, Manypeaks and Boxwood Hill; it is relatively rare but probably not endangered (Conservation Status 2R, *fide* Leigh et al. [1988]). It grows in loamy sand in open shrub mallee dominated by Eucalyptus redunca Schauer and in loam and clay in Wandoo and Swamp Yate woodland.

Phenology. Flowering specimens have been collected in August and September in nature but in cultivation, the flowering period is longer, extending from late July to October. Specimens with mature fruits and seeds have been taken in early December.

Discussion. The new species (named in allusion to the phyllodes usually being more or less deflexed, at least in age, and the retrorse pubescence of

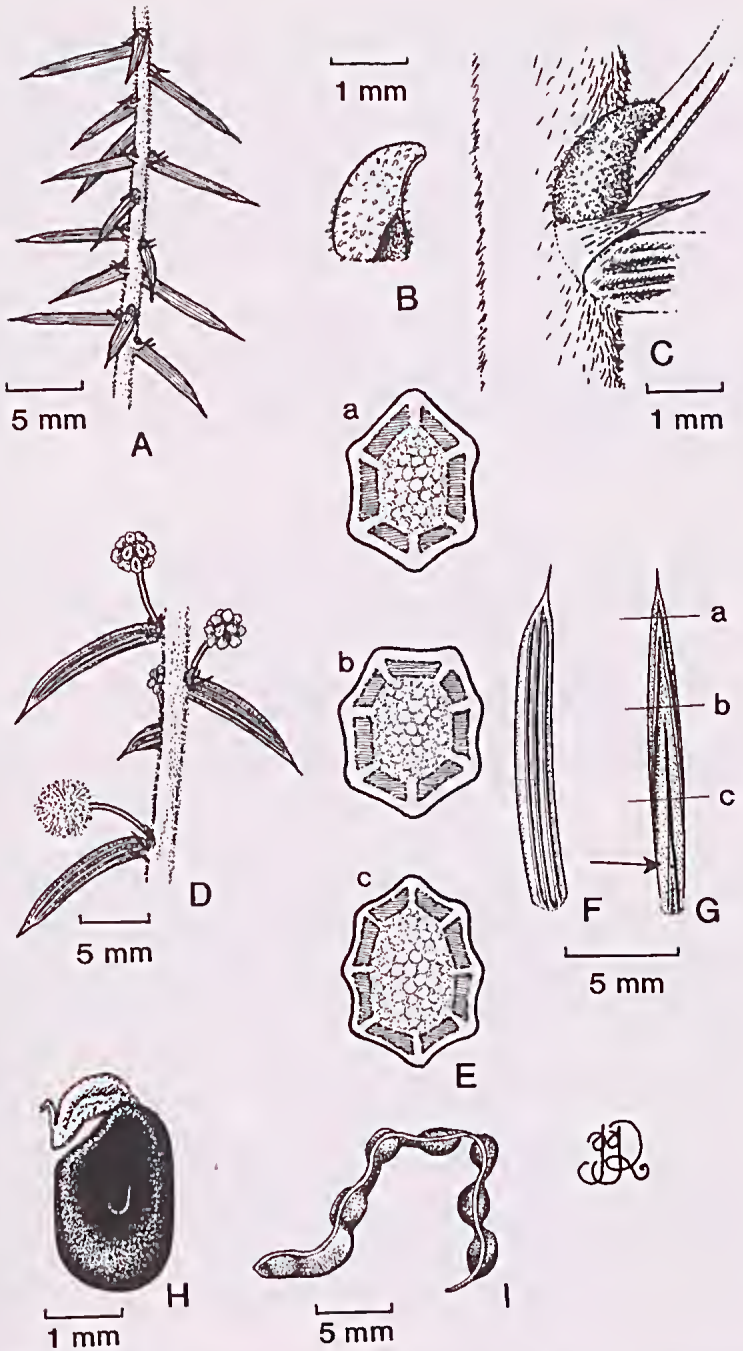

Figure 1. *Acacia declinata*. A — portion of sterile branchlet; B — basal bract; C — one phyllode axil with base of phyllode, peduncle subtended by stipule and basal peduncular bract respectively; D — portion of flowering branchlet; E — diagrammatic sketches of three transverse sections of phyllode indicated at Ga-c; F — lateral view of one phyllode; G — adaxial view of one phyllode; H — seed; I — legume.

A-D from Ashby 4603 (type); E-I from Stevens KRN 9516-1 (for K. Newbey).

the branchlets) is one of the Section Plurinerves, related to the '*A. sulcata* group' (*A. sulcata, A. brachyphylla, A. dura, A. nitidula, A. tetanophylla* and two undescribed species from southern Western Australia). It differs from all the other members of the group, except *A. tetanophylla*, by its cuspidate-pungent phyllodes. *Acacia tetanophylla* is readily distinguished from the new species by its longer, 6-or 7-nerved phyllodes; moreover, it is a 1-2 m, erect shrub. *A. declinata* is also similar in general appearance to *A. retrorsa* in its small, retrorse phyllodes and prostrate habit; however, the latter has 5-nerved phyllodes, striate branchlets and it is found in the area west and north of Badgingarra, far northwest of the range of the new species.

ACKNOWLEDGEMENTS

We are indebted to Mr Peter Luscombe for information he provided with respect to the distribution of the species and its culture. To John Rainbird goes our special thanks for the beautifully executed drawing that accompanies this text.

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THE TERRESTRIAL VERTEBRATE FAUNA OF THE TORNDIRRUP NATIONAL PARK

By V.W. SMITH, 1 Karrakatta Road, Goode Beach, Albany, 6330.

INTRODUCTION

The Torndirrup National Park is situated on the peninsula south of Princess Royal Harbour and King George Sound at Albany on the south coast of Western Australia. The area was gazetted as a Reserve in 1918 but not named until 1969 when it came under control of the National Parks Board. This narrow and relatively small Park is about 20 km from east to west, of some 3,800 hectares (Figure 1). It is one of the two southernmost National Parks in Western Australia, with West Cape Howe National Park further west. No fauna surveys had apparently been carried out prior to this one which commenced in 1986 with encouragement from the staff of the Department of Conservation and Land Management (CALM), Albany.

The plutonic rocks of the rugged peninsula are porphyritic granitoid, in places intruding into gneiss and overlaid by Pleistocene deposits of limestone (Muhling & Brakel, 1982). Some limestone later eroded away exposing monadnocks or granite outcrops, particularly in the central third of the Park where most of this survey was carried out. Impoverished sands cover most of the Park. Water tends to lie in many low-lying areas during the winter but there is no permanent surface water, though moist areas occur in hollows or around rock outcrops.

G.J. Keighery (1988, pers. comm.) includes at least 450 species in an interim list of plants in the Park. There is unusual diversity for such a small coastal park. Predominant over the trapping areas during this survey were sedges and sword grass, *Lepidosperma* species, which formed a dense undergrowth. Dryandras, seven species of Banksias (four of which occurred mainly in the central third), Peppermints (over limestone), Christmas